



This is a digital copy of a book that was preserved for generations on library shelves before it was carefully scanned by Google as part of a project to make the world's books discoverable online.

It has survived long enough for the copyright to expire and the book to enter the public domain. A public domain book is one that was never subject to copyright or whose legal copyright term has expired. Whether a book is in the public domain may vary country to country. Public domain books are our gateways to the past, representing a wealth of history, culture and knowledge that's often difficult to discover.

Marks, notations and other marginalia present in the original volume will appear in this file - a reminder of this book's long journey from the publisher to a library and finally to you.

Usage guidelines

Google is proud to partner with libraries to digitize public domain materials and make them widely accessible. Public domain books belong to the public and we are merely their custodians. Nevertheless, this work is expensive, so in order to keep providing this resource, we have taken steps to prevent abuse by commercial parties, including placing technical restrictions on automated querying.

We also ask that you:

- + *Make non-commercial use of the files* We designed Google Book Search for use by individuals, and we request that you use these files for personal, non-commercial purposes.
- + *Refrain from automated querying* Do not send automated queries of any sort to Google's system: If you are conducting research on machine translation, optical character recognition or other areas where access to a large amount of text is helpful, please contact us. We encourage the use of public domain materials for these purposes and may be able to help.
- + *Maintain attribution* The Google "watermark" you see on each file is essential for informing people about this project and helping them find additional materials through Google Book Search. Please do not remove it.
- + *Keep it legal* Whatever your use, remember that you are responsible for ensuring that what you are doing is legal. Do not assume that just because we believe a book is in the public domain for users in the United States, that the work is also in the public domain for users in other countries. Whether a book is still in copyright varies from country to country, and we can't offer guidance on whether any specific use of any specific book is allowed. Please do not assume that a book's appearance in Google Book Search means it can be used in any manner anywhere in the world. Copyright infringement liability can be quite severe.

About Google Book Search

Google's mission is to organize the world's information and to make it universally accessible and useful. Google Book Search helps readers discover the world's books while helping authors and publishers reach new audiences. You can search through the full text of this book on the web at <http://books.google.com/>

FROM

LONDON TO PORTSMOUTH.

MR. CUNDY'S
REPLY

TO

ANONYMOUS AND OTHER AUTHORS

OF MALIGNANT

ABUSE AND MISREPRESENTATION,

ON HIS

PROJECTED LINE,

FURNISHING TRUTH FOR LIBEL;

WITH PLAN OF SURVEYS, &c.

LONDON:

SOLD BY MESSRS. RIVINGTON, ST. PAUL'S CHURCH YARD;
PARBURY, ALLEN, & CO. LEADENHALL STREET; RIDGWAY,
PICCADILLY; EGERTON, CHARING CROSS; HEBERT, CHEAP-
SIDE; WILSON, ROYAL EXCHANGE; RICHARDSON, CORNHILL;
AND SMITH, ELDER, & CO. CORNHILL.

1828,

Price Two Shillings and Sixpence.

28.

199.



600011256L

v. 24. 1828.
IMPERIAL SHIP CANAL

FROM

LONDON TO PORTSMOUTH.

**MR. CUNDY'S
REPLY**

TO

ANONYMOUS AND OTHER AUTHORS

OF MALIGNANT

ABUSE AND MISREPRESENTATION,

ON HIS

PROJECTED LINE,

FURNISHING TRUTH FOR LIBEL;

WITH PLAN OF SURVEYS, &c.

LONDON:

SOLD BY MESSRS. RIVINGTON, ST. PAUL'S CHURCH YARD;
PARBURY, ALLEN, & CO. LEADENHALL STREET; RIDGWAY,
PICCADILLY; EGERTON, CHARING CROSS; HEBERT, CHEAP-
SIDE; WILSON, ROYAL EXCHANGE; RICHARDSON, CORNHILL;
AND SMITH, ELDER, & CO. CORNHILL.

1828.

Price Two Shillings and Sixpence.

199.

THE PUBLISHED WORKS OF

JOHN RUSKIN

IN TEN VOLUMES

WITH

AN INTRODUCTION BY

JOHN RUSKIN

AND



BY

JOHN RUSKIN

WITH

BY

JOHN RUSKIN
THE PUBLISHED WORKS OF
JOHN RUSKIN
IN TEN VOLUMES
WITH
AN INTRODUCTION BY
JOHN RUSKIN

LONDON:

**PRINTED BY J. J. HASWELL, ADDLE STREET,
ALDERMANBURY.**

TO THE
LANDOWNERS, MERCHANTS, BANKERS,
SHIPOWNERS, MANUFACTURERS,
AND
TRADERS OF THE BRITISH EMPIRE.

MY LORDS AND GENTLEMEN,

I HAVE so frequently had the benefit of anonymous aspersion and misrepresentation from the *Times* and *Herald* papers, while labouring with no ordinary fatigue of mind and body on that vast national undertaking, the Imperial Ship Canal, without the opportunity of replying through the same channel, that I should hope apology were unnecessary for again introducing myself on your notice and attention, and which I should have done earlier had not the immediate pressure of business prevented my so doing. It behoves me in an undertaking of this importance to give you *fact* for *falsehood*, and which the perusal of the following will warrant:—

MR. CUNDY begs to ask the Messrs. Rennie, in answer to the article published in the *Times*, of 22d November, and their Report, dated the 12th of October last, hereunto annexed, whether the Barge Canal from London to Portsmouth, contemplated in the years 1800 and 1815, was not projected by another gentleman, under the patronage of the late *Duke of Norfolk*, the *Earl of Egremont*, and others, and that the late Mr. Rennie was employed to make the surveys and plans, for the purpose of obtaining an Act of Parliament; and whether Mr. Rennie did not survey the three following Lines of Country, viz.—

First, Down the River Thames to the Mouth of the River Medway, up the windings of the Vale to the summit, by Smallfield Common, to St. Lenard's Forest, Horsham, Slinfold, down the windings of the River Arun to Arundel. The summit of *this line*

proved to be about *five hundred and fifty* feet above the Tides, and distance from London to Portsmouth about 160 Miles?

The Second Line, down the River Thames to the Mouth of the River Durent; up the windings of that stream to the summit, by Westram, Linsfield, Oxstead, and to St. Lenard's Forest, Horsham, and Slinfold; as before, the *summit* of this Line is above 500 feet above the Tides, and the *distance* about 130 Miles from London to Portsmouth.

Third Line, From the River Thames, at Greenwich Creek, following the windings of the Vale of the River Ravensbourn, by Beckenham, Croydon, Smitham Bottom, Merstham, Mason's Bridge, the County Oak, St. Lenard's Forest, Horsham, and Slinfold, as before: and were not the Bills lost, on the ground that Mr. Rennie *had not* taken the best practical Line between London and Portsmouth; and that the *above Lines* pointed out and surveyed by him were *inconsistent* and impracticable;—First, for want of water on the summit level;—Secondly, As connected with the Navigation of the Rivers Thames and Medway, which ought to be avoided;—Thirdly, The long circuitous routs, and the immense elevation, distance, and depths of cutting at the summits for ten or twelve miles, when there is a better line, with ample supply of water, considerably lower level, and a shorter summit to cut through, and about half the distance, without waiting the chances or fluctuation of the Tides?

It is stated that, “in the autumn of 1824, Mr. Elms laid a Plan for a Ship Canal between the same points, (*not the same line, distance, nor construction,*) before five or six gentlemen. Mr. Elms at the same time produced a printed Prospectus,” (with the Plan and Estimate Expence, of from four to five million, which was printed at the back of it, and which was omitted to be stated, as they were ashamed to acknowledge it.)

As they profess to be acquainted with the circumstances of the above case, will they please to inform me the names of the five or six gentlemen alluded to, when and where they assembled to consider Mr. Elms's plan in 1824, as it is assumed to be the Committee of Noblemen and Gentlemen that sat at Messrs. Freshfield, Kay, and Freshfield's upon my Plan in February and March, 1825, which is not the fact? I believe it will be found, that *Mr. Horace Twiss and Mr. Leatham*, with two or three of their friends, formed the said Committee, and Messrs. Andrews and Co. the Solicitors, and sat in an obscure Court in Walbrook.

Mr. Elms's Plan was for a Tide Ship Canal, purporting to be made by Imbanking up all the Rivers on his proposed Line into one stream, without a Lock, Dock, or Basin; distance, 100 miles; and the elevation of the country, from Croydon to near Horsham, is from 200 to 450 feet above the Tides, for the distance of 25 to 30 miles. His Plan has been proved impracticable, which I have no doubt Mr. Elms is aware of. With respect to my printer being Mr. Elms's printer, proves to be accidental, his name is *Mr. Moon*, of Threadneedle Street; I was introduced to him by a respectable

professional man; I never heard of Mr. James Elms until I was attacked by him in the *John Bull* paper, which I answered through the *Morning Herald*; wherein it was proved, that the Designs, Line, Method, Distance, and Construction of the Canal were entirely different, as shewn by Mr. Elms's Plan and Prospectus.

The first idea of a Ship Canal from London to Portsmouth occurred to me in September, 1824, coming from Chichester, by Arundel, to London, up the Vale of the River Arun to Dorking. I afterwards investigated the Line through Guildford, which I at first considered the best, until I had thoroughly investigated the Line by Dorking, which I find to be about six miles and a half less in distance than that through Guildford.

I afterwards called in the aid of Mr. George Morris, Land Surveyor, of Dover Street, Piccadilly, who accompanied me on the Line through Dorking to the Vale of the Arun; and early in January, 1825, the aid of a Solicitor was required, and Mr. Morris introduced me to the then firm of *Messrs. Freshfield, Kay, and Freshfield*, of New Bank Buildings; and on Mr. Freshfield being informed the object of my visit, he readily undertook the business, and entered into the merits of my plan. About 3 or 400 of my announce bills (*or placards as they are styled*) were distributed at Messrs. Freshfield's, with their names thereon, as attorneys to the undertaking. I drew up a Preliminary Report, and many of the most eminent Merchants, Bankers, Bank Directors, and Members of the India Board, Trinity House, Custom House, &c. were consulted at Messrs. Freshfield's; and as soon as I had drawn up my said Report, and laid down my Plan, Mr. Freshfield called a Meeting, early in February, which took place at his office, where many commercial gentlemen attended. I attended with Captain Nicholls, of the Hon. East India Company's Service, Mr. Morris, and others, and laid my Plan and Report before them. The Plan was found so feasible, that the Meeting was adjourned to another day to have the assistance of Mr. Baring, who was then out of town. Mr. Baring wrote to Mr. Freshfield to say he would be in town on a day mentioned, and would attend a Meeting, if called. The second Meeting took place in Mr. Freshfield's parlour, which I attended with my Plans, and my Report was again read to the Meeting; when it was agreed by all present, if the plan was practicable, it would be of the greatest advantage to the Commerce of London. I was requested to make further investigations, as to the practicability, estimated expence, and Revenue to be derived from the undertaking, if completed. And some of the commercial gentlemen then present undertook to furnish data, and to make calculations as to the probable extent the Canal might be used, and Revenue to be derived therefrom. This Meeting then adjourned.

Mr. H. Twiss called on Mr. Freshfield, about the 1st or 2d of March, 1825, introduced by Mr. Leatham, while I and Mr. Morris were with Mr. Freshfield on the Canal business, and called Mr. Freshfield into another room. Mr. Freshfield returned to me

again in half an hour, and informed me that Mr. Twiss and Mr. Leatham had called on him, respecting the Ship Canal from London to Portsmouth, to inform him that Mr. James Elms had a plan for the same object carrying on in Walbrook, with Attornies, Secretary, and Committee. Mr. Freshfield then asked me if I had heard of it; I informed him that I had not, nor did I know, nor had I ever seen to my knowledge Mr. Twiss, Mr. Leatham, or Mr. Elms.

From this time, Mr. Twiss and Mr. Leatham were daily calling on Mr. Freshfield, and I afterwards met Mr. Leatham frequently in Mr. Freshfield's waiting room, whose person at that time I was not acquainted with.

Suspecting things were not going on honourably and fairly, I asked Mr. Freshfield for my Plan and Preliminary Report, which I had left in his hands since the last meeting.

Day after day I renewed this application, and at last *Mr. Freshfield informed me that he had lent it to Mr. Horace Twiss* (my opponent)! I could not help expressing to Mr. Freshfield my astonishment that he should have betrayed the good faith and confidence reposed in him, by exposing my Preliminary Report, drawn up hastily, with estimates of the probable Expence and Revenue, without all the necessary data. A circumstance which might expose a professional man to ruin. However, after numerous applications to Mr. Freshfield, without success, I was compelled to call on Mr. H. Twiss for it, who, in a most gross and ungentlemanly way, told me that he had received my Report and Plan from Mr. Freshfield, and that when he had done with it, he should return it to him. This destroyed all confidence, and brought on a coolness between Mr. Freshfield and myself. I acquainted several friends with what had taken place, and a third Meeting was called by Mr. Freshfield, for the 15th or 16th of March, 1825, at the Great Room in Lincoln's Inn Fields, for 12 o'clock. I attended the Meeting with my Plans, &c. in company with Col. J. Camac, Sir J. Brenton, Captain Brenton, Captain Overend, Mr. Langford, Mr. Morris, Mr. Eustace, and several other gentlemen. When we entered the room we found Mr. Freshfield, Mr. Horace Twiss, Mr. Leatham, Mr. John Rennie, and Mr. James Elms with his Plan, and Mr. Andrews, his Solicitor, and others. Soon after, Sir George Cockburn, Mr. Baring, Mr. Bonham, and many other gentlemen arrived, when Sir George Cockburn was called to the Chair; and after the investigation of the Plans and Sections, and other preliminaries, Mr. Baring commenced examining the several Engineers and Surveyors then present, viz.—Mr. Rennie, Mr. Morris, Mr. Elms, and myself. Mr. Baring commenced by examining Mr. Rennie as to the practicability of the intended Canal, the distance and elevation of the several lines that his father had surveyed for a Barge Canal between London and Portsmouth, and whether his father had surveyed the Line pointed out by Mr. Cundy, from Slinfold over the Holmwood Common to Dorking, which was the direct, shortest, and lowest level to London?

Mr. Rennie replied "No."

Q. Why did he not examine that Line?—A. I do not know.

Q. Is the plan practicable?—Mr. Rennie replied, that the Plan was perfectly practicable.

Q. How many locks will be required?—A. About *twenty* up to the summit level and *twenty* down.

Q. What rise in each Lock?—A. Six or seven feet.

Q. Six or seven feet is about the rise of a Barge Canal Lock?—A. Yes.

Q. What proportion will that bear to the width of a Ship Canal Lock of 50 or 60 feet wide?—No answer.

Q. What is the Estimate Expence of the Canal with twenty Locks up and twenty down, as you stated?—A. It can be executed for a sum within 5,000,000*l*!

Q. Do you think that a sufficient supply of water can be found for a Ship Canal of this magnitude?—A. I do, with the aid of Reservoirs and Feeders to the Summit Level in St. Lenard's Forest.

Mr. Elms, Mr. Morris, and myself were then examined. Mr. Francis Giles was to have attended the meeting, but he was at Liverpool. Mr. Baring addressed the Meeting at great length on the advantages of such an undertaking. After which, Mr. Horace Twiss rose to move the first Resolution, out of *seventeen* which he had already under his elbow, *for the purpose of adopting Mr. Elms's Tide Canal*; but no one seconded it. The Chairman then moved, "That no Resolution should be put to the Meeting, except such Resolutions as were drawn up in the room;" which was seconded by Mr. Baring, and carried.

The Chairman and Mr. Baring then drew up the following Resolutions, viz.

Resolved—"That upon the examination of several Engineers and Surveyors, and other circumstantial evidence laid before this Meeting, that the plan of a Ship Canal between London and Portsmouth is practicable, and can be executed within the estimated expence of 5,000,000*l*., given by Mr. John Rennie, Mr. Elms, and Mr. Cundy; and that such an undertaking would be a great advantage to the Commerce of London." Which was put by the Chairman, and seconded by Mr. Baring, and carried without a dissenting voice.

The Second Resolution was moved and seconded—"That Messrs. Rennie, with the assistance of Mr. Elms, Mr. Cundy, Mr. Morris, and other Engineers, should survey the several suggested lines, and report thereon, and point out the line most eligible for the proposed Canal."—Carried.

Mr. Baring asked Mr. Rennie what would be the probable expence of the proposed survey? Mr. Rennie said from £1500 to £2000.

Mr. Baring, as there were no funds as yet subscribed, asked Mr. Rennie if he would take the expence upon himself to be paid when the funds came in hereafter?

Mr. Rennie replied, that he must decline doing so.

Mr. Horace Twiss then rose and moved a Resolution, "That this Meeting do adjourn *sine die*,"—which was *not* seconded.

Colonel Camac then moved the following Resolution:—

"That this Meeting do adjourn to Wednesday next, the 23d., and then to meet here for the further investigation of the business;"—which was seconded by Mr. Langford, and carried.

Thanks being moved and seconded to the Chairman the Meeting adjourned.

This is the Meeting alluded to in the Article in "The Times" of the 22d November, where it is stated, "that I intruded myself into a strictly private Meeting, where nothing was done."

These Meetings, as I have shewn, were called for the purpose of taking into consideration the best plan, and practicability of the undertaking; and about a third of the gentlemen present were those who attended the Meetings at Mr. Freshfield's, and took an interest in my Plan: and several of them gave in their names for 500 shares each, to the amount of from One to Two Millions, which list is still in their hands. Dated in the months of February and March, 1825.

On the 20th of March, 1825, I received the following anonymous Letter, viz.:—

"London and Portsmouth Ship Canal.

"One or two gentlemen who wish to be further informed respecting the detail of this measure, before any numerous Meeting shall take place, will be with Sir George Cockburn at the Admiralty to-morrow morning (Monday) the 21st, about half-past eleven. If Mr. Cundy wishes to bring forward any proposal, he may then attend for that purpose. But he will be so good as to understand, that it will be at his own risk, and the parties present cannot bind themselves to adopt his suggestions. As this appointment is not a public one, Mr. Cundy will have the goodness to bring no one with him, except those professional Gentlemen who may have assisted him in his Surveys."

This turns out to be in the handwriting of Mr. Horace Twiss, and evidently points out that Messrs. Twiss and Co. were anxious to obtain my opinion and judgment, and to avail themselves of my plan, which they know, full well, is the only one that can be adopted with advantage.

As the Letter was anonymous I did not attend to it. Messrs. George and John Rennie's Report, referred to and given in *The Times* of the 22d November, I pronounce to be a tissue of misrepresentation from beginning to end, and calculated to mislead the public, because the distance, lines, summit cutting, data, and estimate, are incorrect. I beg leave to ask them the following questions, viz.:—

1st. Whether Mr. Giles, and my Assistant, Mr. Brazier, did not make the surveys, take the levels and distance of each projected line required by the Committee?

2d. Whether Mr. Giles and they did not draw up a Report for

their joint signature, founded upon the data laid down in the said Surveys and Sections without an estimate of the expence?

3d. Whether that Joint Report has not been in their possession since the 7th of October last, in which all the projected lines are correctly described by Mr. Giles and Mr. Brazier?

4th. Whether there are not eight ridges of hills shown in the section of the proposed line by Guildford, which they have purposely omitted to mention?

5th. Whether they did not purposely misrepresent the line from the Mouth of the Grand Surrey Canal by Kennington, Streatham, Morton, and Leatherhead; when they well know, by Mr. Giles's Joint Report and data, that the line I had pointed out as the best to be adopted, was from the River Thames, near the King's Dock Yard and Victualling Office, Deptford, by Kennington, South Lambeth, Battersea Marsh, Wandsworth, Merton, Malden, Epsom, Leatherhead, Dorking, Ockley, Slinfold, Pallingham, Pulborough, and Arundel?

6th. Whether they did not, at two distinct Meetings, give their estimate expences within *five millions*, which estimate has been printed and published?

7th. Whether either of them ever went over the projected lines from London to Portsmouth, which they have reported upon to the public?

8th. Whether they can form a probable estimate of expence, without correctly investigating the geology, under strata, elevation, and distance of the country through which the Canal is proposed to pass?

9th. Whether they did not send to Mr. Giles for his Joint Report and Sections, in October last, without stating to him what they wanted them for; and whether they did not draw up their Report contrary to the facts laid down by Mr. Giles?

10th. Whether they did not deliver their superficial Report, drawn up from a bird's eye survey made in a carriage from London to Guildford over the Hills to Dorking in October last? And whether they did not deliver their Report to Mr. Horace Twiss and Mr. Freshfield for publication in *The Times*?

It is stated, "That the book which Mr. Cundy has put forth contains three distinct papers which he calls 'Reports.'" I beg leave to state, that I have published 1500 of them, consequently they are before the Public; and there can be no doubt that a hundred or two of them may be in the hands of many eminent men of science.

I therefore respectfully appeal to the whole profession of Architects and Engineers, whether the above papers as they are called, or book, be not drawn upon the principle of science, and the conclusions I have come to, upon the geology of the country. The construction of the Canal, and the whole circumstances of the design, drawn from incontrovertible data, and not a single word or line has been written to question the principles I have there laid down upon inland navigation. I have been assisted in the

Surveys by some of the most able Surveyors and Engineers, among them.—Mr. James Gardner, late Trigonometrical Surveyor of His Majesty's Ordnance, Mr. Francis Giles, Mr. John Wright, Mr. James Brazier, and others, who have taken the levels and surveys upon all the projected lines.

And whether Mr. Giles and Messrs. Rennie have not adopted my data in their section, construction, and levels of the land, by raising above the tide 120 feet, up to the summit level? And whether the construction of my 30 feet-rise Lock and Bridges are not scientifically constructed, and entirely new in the principle of inland navigation, which I have designed purposely for this Canal? And whether Mr. Giles and Messrs. Rennie have not adopted in their intended joint Report the whole of my line, from the River Thames at or near the Victualling Office, and Cherry Garden Stairs, Rotherhithe, to the Kent Road, Kennington, South Lambeth, Wandsworth, Merton, Malden, Epsom and Leatherhead Commons, differing from my Line only from Leatherhead Common through Guildford, instead of Dorking; and fall into my Line again at Pallingham, and follow it by Pulborough, Arundel, Chichester, Langston, and Spithead.

With respect to Mr. Giles deviating from me at Leatherhead Common to Guildford is no doubt founded by that highly respectable professional man upon principles which he himself can explain if called upon, of which I have stated my opinion in my Reports now before the public.

The fact of Messrs. Rennie's condemning my line by Dorking is untrue as shown by their Report; as also in Messrs. Giles and Rennie's Joint Report, which I shall be obliged by their publishing, for public information and justice!

The Line by Dorking will be found to be far preferable to any other; first, it is the shortest, in point of distance, to any other Line by six miles and a half, and much less in cubical cutting and expence, and can have the additional supply of 3,000,000 tons of water from the Reservoirs in St. Lenard's Forest, which cannot be supplied to the summit of the Line by Guildford, without carrying the Feeders from twelve to fifteen miles through hills and dales at a great expence. Messrs. Rennie say that the summit by Dorking cannot be carried more than seven miles, while I am enabled to prove, that it can be carried from twenty-four to twenty-five miles without a Lock, upon actual admeasured surveys.

And with respect to the Line by Guildford, pretended to be pointed out by Messrs. Rennie, it was first adopted by me, in September, 1824, but I found it every way objectionable; first, on the ground of its circuitous rout and distance; secondly, on the ground that there are eight ridges of hills to cut through; thirdly, the summit hill is about 174 feet above the tides, and twelve miles through at its base; and lastly, but not the least, it must pass through the hill at Guildford, and about five hundred houses of that town would have to be taken down, together with the county gaol, the church, and castle; which *Messrs. Rennie have*

omitted to state in their very superficial Report, and which is distinctly shown in the section drawn by Mr. Giles and Mr. Brazier, in Messrs. Rennie's possession.

In answer to the statement, in said article of the 22d November, that "*they* altogether disclaim any participation in what I am doing," I beg leave to ask, upon what plan did the Committees meet at Mr. Freshfield's to consider? Was it Mr. Elms's, Mr. Rennie's, or mine? Certainly not Mr. Elms's plan for a Tide Canal; for it was seen that his plan would not do, either in point of construction or distance. It was my Plan, after all, that they met upon to consider; which they know full well is the only line that should be adopted, notwithstanding what has been done by the united efforts of Mr. Twiss, one of the Committee, and Mr. Freshfield, Solicitor to the same, to accommodate their friends, the Messrs. Rennie, at my cost and experience, although as a matter of course they were in no way to be benefitted.

How is it that Messrs. Rennie omitted to describe the geology, the cutting, and the understrata and hills on the Line through which they would have to pass, and upon which their estimate is founded, *the first consideration of an experienced Engineer?*

And with respect to the estimates Messrs. Rennie gave on the 16th March, 1825, at the Public Meeting in Lincoln's Inn Fields, when examined by Mr. Baring, that this Undertaking could be executed *with 20 Locks up and 20 down for less than £5,000,000?*

At a Meeting of the Committee at Mr. Freshfield's about the 25th of March, 1825, Mr. Rennie again gave his Estimate "*within the said £5,000,000*, which was printed and published by them, wherein it is stated that the Calculation, prepared by the Originator of the Measure, (who was the Originator of the Measure but myself?) and carefully examined and reported upon by several Gentlemen of the highest eminence in the Commercial and Maritime affairs of this Country, induced the belief that even upon this large Capital there would be a reasonable return *in time of peace, with a prospect of a very great increase in time of war.*" Now, from their own showing, this plan will bear *5 per cent.* upon *six and a half millions* in time of peace, then it must produce about eight and a half *per cent.* upon my Plan of £4,000,000, and in time of war considerable more; in my Book and Prospectus I have given an average Revenue.

" A PROPOSAL for a SHIP CANAL from LONDON
 " to PORTSMOUTH, capable of conveying LINE of
 " BATTLE SHIPS and the largest MERCHANTMEN,
 " having been submitted to several Noblemen and Gentle-
 " men, and the preliminary opinions of eminent Engineers
 " having been expressed in terms so favourable as to war-
 " rant the recommendation that a detailed survey, under
 " the direction of the Committee of Management herein
 " after named, be forthwith made by Messrs. Rennie, with
 " or without other professional assistance as the Committee
 " may determine, in order to ascertain, with the utmost

“attainable precision, the amount of the probable expense, and the most eligible of the several suggested lines, the foundation of a Company has been laid for the conduct of so important a national object. *The rough estimates of this work give reason to believe that the expense will be within five millions sterling, and the official returns and calculations, prepared by the originator of the measure, (Mr. Cundy) and carefully examined and reported upon by several Gentlemen of the highest eminence in the commercial and maritime affairs of this country, induce the belief, that even upon this large capital, although the whole should be required, there would be a reasonable return in time of peace, with a prospect of a very great increase in time of war, by a levy (upon those vessels which will have an unquestionable interest in using the Canal) of from 2s. 6d. per ton upwards, according to their tonnage.*

“In order, therefore, to defray the requisite survey, and other necessary expences, Messrs. Smith, Payne, and Smith, Mansion House Street, and Messrs. Cockburn and Co. Whitehall, will receive applications (directed to Charles Dance, Esq. the Secretary) for 5,000 subscriptions of 1l. each, with power of adding to that number. These applications will be taken into consideration, and appropriated by the Committee of Management, and every such subscription of 1l. will entitle the accepted Subscriber to take up ten shares of 100l. each, (making 50,000 or more such shares,) if the Subscribers, when the completion of the Survey may have furnished full information, shall decide to claim them. To facilitate that decision, the result of the Survey, which will probably occupy several weeks, will be reported to the Subscribers on the earliest possible day after its termination, at a meeting, of which general notice will be given.

“For deciding upon the applications of gentlemen desirous to subscribe, for directing the investigation of the plan, for defraying the expenses incurred, and to be incurred, and for the other purposes of the undertaking, the following Noblemen and Gentlemen have undertaken to be the Provisional Committee of Management, three of whom will be Trustees of Deposits:—

“Lord Viscount Palmerston, M. P.

“Vice Admiral Sir George Cockburn, G. C. B. M. P.

“Captain Sir Jahleel Brenton, R. N. K. C. B.

“William Manning, Esq. M. P.

“Thomas Wilson, Esq. M. P.

“Horace Twiss, Esq. M. P.

“Solicitors to the Provisional Committee—Messrs. Freshfield, Kay, and Freshfield, New Bank Buildings.

“Secretary, Charles Dance, Esq.

“March, 1825.”

I now trust that I have fully proved, beyond all doubt, that I have had a conspiracy going on against me for more than two years for the purpose of impeding me, and wresting the above grand National Design out of my hands.

After expending 4 years of my time upon the above undertaking, every obstacle is brought forward by anonymous writers, who are ashamed of their own actions, at a time when I am comparatively on the threshold of the *Houses of Parliament* with my Plans, to take the opinion of the Legislature upon the whole case; having expended large sums of money on the Plan, for which I have not received one shilling.

Should I have satisfied you that such aspersions and falsehood revert on their authors, I am content; and though contempt for such conduct might be better adapted to those who shun the light, my situation requires that the British Public should not be misled. I am necessitated to stand forward in defence of my reputation, both as a private and public individual.

“He who steals my purse steals trash.

’Twas mine; ’tis his, and has been slave to thousands:

But he who robs me of my good name, robs me of that

Which not enriches him, but makes me poor indeed.”

If I had interfered with the Messrs. Rennie in any way,—for instance, had said they had built Southwark and London Bridges 15 feet too high, or that they had benefitted in more instances than one by the unrivalled talent and genius, as an artist, of the late Mr. Dodd, the ostensible designer of Waterloo Bridge, and other public undertakings, although finished by the Messrs. Rennie, while he was suffered to perish for want, they might have had reason to complain. Intrigue and chicanery may answer some men’s ends, but I will take care that neither shall prevail so far as to rob me, like that great man, of the merit due to my labours, however it may deprive me of the recompence which every man is entitled to for extraordinary exertions.

The following are Estimates of similar undertakings, given at different periods by eminent Engineers, viz.

The estimate of the Ship Canal from the Bristol to the English channel, made by Mr. Telford, with 29 locks up to the summit and 29 down distance 42 miles, amounts to 1,750,000*l*.

Mr. Elms’ estimate for a Tide Ship Canal, on a line of 100 miles distance from Greenwich to Portsmouth, amounts to within 5,000,000*l*.

Messrs. Rennie’s two estimates for a Ship Canal between London to Guildford and Portsmouth, distance $88\frac{1}{2}$ miles, with 20 locks up and 20 down, given at two distinct periods and meetings, in March 1825, are within 5,000,000*l*.

Estimate given by the Engineer, for a Ship Canal between Galway and Dublin, distance 182 miles, with 72 locks, 5,486,400*l*.

An estimate is published in the *Morning Herald*, Nov. 3. 1827, of Mr. Cundy’s Portsmouth Ship Canal, including the items, at 4,976,120*l*.

My estimate, with four locks up and four down, distance from London to Portsmouth 82 miles, amounts to 4,000,000*l*.

I have the honour to be, with the highest consideration, your obliged humble servant,

N. W. CUNDY.

London, January 25, 1823.

The following is the statement above alluded to, published in the *Times* at the head of Messrs. George and John Rennie's Report:—

Times, Nov. 22d. 1827.

"Many years ago the late Mr. Rennie projected a canal from London to Portsmouth. In the autumn of 1824, a proposal for a ship-canal between the same points was laid before five or six gentlemen by Mr. Elmes, who stated that the idea of a ship-canal had originated with his father some years before. Mr. Elmes produced at the same time a printed prospectus, containing a rough estimate, and a detail of the supposed advantages. The gentlemen in question thought it *prima facie* worthy of attention and inquiry, and devoted a considerable portion of time and money to procure every species of public return and private information which could throw light upon the subject, and assist them in coming to an estimate of the probable revenue of the work if carried into execution. Feeling that so magnificent a national work ought not to be brought forward upon any insecure foundation, they determined to abstain from advertising, or calling in any way on the public for money, until something satisfactory and incontrovertible should be established on this head. When they had been thus employed for several weeks, a placard appeared in various parts of the city, announcing that Mr. Nicholas Wilcox Cundy would, in a few days, submit to the public a prospectus for a grand ship-canal from London to Arundel-bay. It may not be immaterial to remark, that this placard was printed by the same person who had printed the prospectus for Mr. Elmes, and whom Mr. Elmes had in the mean time, for some reason, quitted for another printer; and it should be observed, that the book which Mr. Cundy has put forth contains three distinct papers, which he calls reports, the second and third of which have the date of a specific month, while to the first are simply affixed the word and figures, 'London, 1824.' The gentlemen who had entertained Mr. Elmes's proposition had now no course left but to advertise at once and take possession of the ground. The consequence was, that they received numerous applications for shares, which were duly registered; but, adhering to their original determination of not idly possessing themselves of other people's money, they altogether refused receiving deposits, which were in many instances pressed upon them. After several meetings, all of them strictly private (except for the unexpected appearance of Mr. Cundy at one of them, where nothing was done), a committee of six noblemen and gentlemen

undertook the provisional management; and as by this time several different lines had been suggested by several different projectors, it was agreed to insert an advertisement in the papers, stating that no conclusion could be formed until a preliminary survey had been made by competent engineers; for which purpose the Messrs. Rennie had been selected: that consequently subscriptions (not deposits) of 1*l.* each would be received to effect this object; and that each person subscribing such sum of 1*l.* should be entitled (not compelled) to take up ten shares in the concern, if, in consequence of the inquiry so instituted, any company should thereafter be formed. So much time, however, had been consumed in the previous investigations, that all relish for speculations of any sort was gone by, and only about 220*l.* was subscribed, of which 100*l.* was given by one of the committee, Mr. Wilson, then member for the city of London. Still the survey was very liberally completed by Messrs. Rennie, with the able assistance of Mr. Giles; and we are now enabled to lay before our readers the report which those gentlemen have made to the committee, the names of which committee, being Lord Palmerston, Sir George Cockburn, Sir J. Brenton, Mr. Manning, Mr. Wilson, and Mr. Twiss, have been copied by Mr. Cundy into his book, as if that committee had been acting in adoption of any designs of his! Our readers will perceive by Messrs. Rennie's report, that whereas Mr. Cundy, in his book, asserts roundly that Messrs. Rennie and Mr. Giles confirm him in every particular, and state that his line, by Dorking, is the preferable one; they distinctly condemn it, on the score of the natural difficulties, and of the enormously extra expense with which it would be attended. Mr. Cundy's book is so complete an answer to itself, that to any mind capable of the most moderate reflection no other need be given; but we know not with what face to recommend our readers to spend 10*s.* upon it, unless, indeed, any one contemplated subscribing for shares, and then the purchase would be a cheap one. As to the original supporters of the measure, it only remains to say, that perceiving the time gone by for such matters, and feeling that it was impossible to raise the immense sum of money required, even on the cheapest plan, without extensive aid from Government, which it was not disposed to afford, they abandoned all notion of it for the present, took every farthing of the expense incurred upon themselves, and left the 220*l.*, which had remained untouched, to the inadequate remuneration of the survey. They altogether disclaim any participation in the extraordinary statements which Mr. Cundy has from time to time put forth, and in the advertisements for deposits which is at present going the round of the papers. At the same time, they wish it to be understood, that they are sensibly alive to the immense importance of the project; that they believe in its practicability; that the result of their calculations justified an expectation of about 5 per cent. in time of peace, with a material increase in time of war, upon a capital of six millions and a half, being the smallest amount for which the Messrs. Rennie estimate

“ that the work could be executed; and that at any moment
 “ more favourable to its execution, they are in a condition to aid
 “ it with the produce of their labours.”

MESSRS. GEORGE AND JOHN RENNIES' REPORT.

“ *London, October, 12. 1827.*

“ In consequence of the resolution passed at a meeting held at Mr.
 “ Freshfield's in the spring of 1825, for the purpose of considering
 “ the practicability of forming a grand canal between London and
 “ Portsmouth, capable of receiving the largest class of vessels, we
 “ were requested to make a survey of the whole of the interven-
 “ ing country, in order to ascertain the practicability of the
 “ undertaking, and to investigate the merits of the different lines
 “ proposed for the same by Messrs. Cundy, Elmes, and Morris;
 “ and, lastly, whether any other line could be found which, under
 “ all the circumstances of the case, should be more eligible than
 “ any of those proposed, and which would be most likely to meet
 “ the object in view. We accordingly employed Mr. Francis
 “ Giles to take the necessary levels and survey, and it is but due
 “ to him to say, that he has discharged the arduous trust imposed
 “ on him with great judgment; and we have subsequently ex-
 “ plored the country in person, and now beg leave to lay before
 “ you, for the information of the various parties concerned, the
 “ result of our observations.

“ A good communication by inland navigation between Lon-
 “ don and Portsmouth has long been an object of importance,
 “ and, as far back as the year 1800, the late Mr. Rennie turned
 “ his attention to the subject; so that, in addition to the present
 “ investigation, the whole line of country has been well examined,
 “ so as to enable us to describe, with tolerable precision, the best
 “ line for the proposed canal, together with comparative merits of
 “ all the other lines.

“ There are five lines through which a canal between London
 “ and Portsmouth may be made: first, commencing, with the
 “ river Darent, which enters the Thames below Dartford, and
 “ continuing up the valley and crossing the summit near Wester-
 “ ham, Smallfield-place, and Limpsfield, and continues from
 “ thence by Horsham, Slinfold, to Pallingham Quay, where it
 “ enters the vale of the river Arun, and continues from thence by
 “ Arundel to Portsmouth, either inland or through Langston and
 “ Chichester harbours. The highest point of this summit is 500
 “ feet above the level of high water of spring tides, and the total
 “ distance from the Thames to Portsmouth harbour, besides the
 “ river navigation, is above 100 miles. This line, with the excep-
 “ tion of the great height of the summit, is favourable; but the
 “ extra length and enormous expense of cutting through the sum-
 “ mit render it inadvisable within any moderate means.

“ The second line departs from the river Thames near Green-
 “ wick, and pursues the vale of the Ravensbourne, from thence
 “ by Croydon to Merstham Gap, by Smitham Bottom, where it
 “ crosses the summit, which is above 430 feet above the level of
 “ the tide, and continues from thence by Smallfield-place, Hor-
 “ sham, and Slinfold, to Pallingham-quay, where it enters the

“vale of the river Arun, and continues from thence to Portsmouth harbour by the same route as the other. The total distance from Deptford to Portsmouth is about 100 miles. This line is very favourable; for, after passing the summit, to cut through which, however, would be a very expensive operation, a level of 50 miles might be obtained without a lock; very little, if any, valuable property would be interfered with, except immediately near Greenwich and Deptford. This is the line chosen by Mr. Elmes for an open canal without locks, which is proposed to be effected by cutting down to the level of the tideway, and to admit all the rivers and streams from the country through which it is intended to pass. This scheme would be almost impracticable, on account of the enormous expense, and when executed would not answer the purpose, as it would be either dry in summer, or flooded in winter, and consequently unfit for navigation; and if it is to be executed at all, should be made with locks and reservoirs.

“The third line departs from the Thames, at Deptford, near the entrance of the Grand Surrey Canal, and continues from thence by Kennington, Streatham, Merton, Leatherhead, Dorking, Holmwood Common, Ockley, Pallingham-quay, and Arundel; from thence, by the same route as the others, to Portsmouth harbour. The distance by this line would be about 83 miles from London to Portsmouth, and the height of the summit, near Dorking, is 382 feet above the tideway. The expense of reducing the summit to about 120 feet above the tide level, as proposed by Mr. Cundy, in order to reduce the lockage and ensure a constant supply of water, would be, like the other summits, a most serious operation. This might be reduced, by keeping a level of 80 feet higher; but even then, the cutting of this would still be very great; or by keeping more to the lower range of country, to the east of Holmwood common: but then the length would be increased about three miles, and, after all, the cutting would be a very considerable operation. This is the line which has been chosen by Mr. Cundy.

“The fourth line projected by Mr. Morris, between Dorking and Ockley, by the way of Wotton and Abinger, instead of Holmwood common, is only a diversion from Mr. Cundy's, which is higher above the tideway, and consequently more objectionable.

“In consequence of the objections to the various lines above stated, we continued our researches, in order to find out another line which might be more eligible; and in this we hope we have been successful, namely,

“The fifth line, which commences at the Thames near Deptford, and continues from thence by Kennington, Malden, Chessington, Epsom common, to Guildford, from thence to the summit of the country, between the Wey and Arun rivers, near Alford, which is only 174 feet above the tideway, or 208 below that of Dorking. From thence to Loxwood and Pallingham-quay, where it follows the vale of the river Arun, and continues from thence, by Arundel, to Portsmouth, in the same line as the others. The total length of this line would be

“ about 86 miles, and the country, upon the whole, very favourable. By assuming a level of 120 feet above the tide, the summit might be passed with tolerable facility, as the difficulties before encountering it would be comparatively trifling; and by this line a level of 26 miles, without a lock, at only 120 feet above the tide, would be obtained; whereas, by the Dorking line, a level of only seven miles would be obtained, with a length of 200 feet above the tide, and that at an extra expense. Upon the whole, therefore, considering all these circumstances, the line by Guildford appears preferable to any of the others.

“ The above are the leading features of the scheme: but if ever it should be carried into effect, various collateral branches might be made to it to connect different places together, with docks, entrance basins, and harbours, which at present it would be premature to enter upon.

“ With regard to obtaining the proper supply of water to feed the lockage, by assuming a summit sufficiently, and compensating the mill-owners of the different streams which would be intercepted, and making proper sized reservoirs, drains, and feeders, in the adjoining high country, we have very little doubt but that it would be obtained.

“ With regard to the sum that would be necessary to carry such a gigantic undertaking into effect, so as to accommodate the largest vessels, we feel considerable difficulty in giving a decided opinion, for it embraces such a variety of subjects, besides making the canal; such as the value of the land, (which for eight or ten miles out of London, for the most part, must be taken as building-ground) houses, compensations to mill-owners, and variety of other points to have obtained, which correctly would have occasioned a much greater expenditure than we feel ourselves warranted to enter upon. We have entered, however, into the leading points, and are satisfied, that if the line by Guildford should be adopted, a sum not less than 6,000,000*l.* to 6,500,000*l.* would be required.* If, however, the Line by Dorking should be adopted, a much larger sum would be necessary. Before anything, however, is decided with regard to a subject of such importance, the whole should be more thoroughly investigated.

(Signed,) GEORGE and JOHN RENNIE.”

“ * Mr. Cundy says the Revenue *will be* 700,000*l.* per annum, and the costs *will not exceed* 4,000,000*l.*, thus producing 17½ per cent., per annum!”

In reply to the numerous attacks put forth against me in the *Times* and *Herald* papers from time to time, I have felt it my duty to the Public to republish the three following answers, viz.

TO THE EDITOR OF THE PUBLIC LEDGER.

SIR,

As my time is much occupied at present in superintending surveys that are going on, for the purpose of preparing the Plans which are to be laid before Parliament, it is utterly impossible for

me to enter into controversy with every one who may think proper to call in question either the expediency or the practicability of carrying into effect so stupendous a monument of our national wealth and enterprize, as the Grand Imperial Ship Canal; and though I have cogent reasons for believing *all* the attacks emanate from one or two gentlemen, whose proffered services I have declined, I am still, in this instance, induced to violate the determination I had formed, not to be goaded into disquisition on the subject, feeling it my duty to assure the Public I have not ventured to announce the high and very liberal patronage which the Prospectus holds forth wantonly, or unsanctioned by those who, as *individuals*, could give their assent. I beg leave further to observe, that it is not intended that those who are named Commissioners *merely by virtue of their office*, should be compelled to hold any shares, and that the Act will contain a clause to protect persons from being liable for more than the amount of their subscriptions.

I beg to assure the Public, that any well-meant advice I shall at all times most thankfully receive, and as cheerfully afford every facility to enquiries that may be made by those who are in any way interested in the undertaking; if they will favour me with a call, or if resident out of London, their communications shall be promptly attended to.

I have the Honour to be, Sir, your very obedient Servant,
N. W. CUNDY.

Nov. 8, 1827.

Projector and Civil Engineer.

TO THE EDITOR OF THE MORNING HERALD.

SIR,

Having observed in some of the London papers, statements, that the estimated sum of 4,000,000*l.*, which would be required for making the proposed Ship Canal from London to Portsmouth, would be totally inadequate for the purpose, I beg leave to observe, that such estimate is founded upon the fullest investigation, incontrovertible data, and scientific principles; and upon which, to enable the public to form a correct opinion, it is requisite the four following questions should be well understood:—1st. The distance on the line of canal from London to Portsmouth. 2dly. The level of the country. 3dly. The under strata through which the canal is intended to be cut. And 4thly. The construction of the canal, locks, bridges, and basins. Some of our most eminent engineers, have been called in at a public meeting (Sir George Cockburn in the Chair), and examined by Mr. Baring, and given it as their opinion that the canal, by a line they pointed out, of one hundred miles distance, with twenty locks up to the summit, could be cut for a sum within four millions; while the distance upon the line which I have proposed is only seventy-eight miles (of which fifty is tide level, with four locks up to its summit, through an under strata, the hardest of which I have to cut is chalk), constructed with tide-locks at each extremity of the canal, to raise seven feet

above the tide, which will save about one-third of the last-mentioned expense. I therefore respectfully and confidently submit, that my estimated expense of four millions for completing the canal, will be sufficient; and it will appear, on reference to my Reports, that my first estimate did not amount to more than about three millions and a half, and that my present is within four millions. This last estimate has been made with a view to meet an extra expenditure, which will arise from my now carrying the line through Kennington and Walworth, instead of Brixton and Tooting, as originally intended, by which I have tide level the first eleven miles on the line.

Some have said, that the whole country will be cut up by canals; and others, that four millions cannot be raised in four years, for performing a domestic and public undertaking, in the utility of which, and that the cause of humanity would be thereby promoted, and our commerce extended, all classes concur. What would Mr. Pitt have said had he been told that Great Britain could not have raised four millions in four years, to perform an undertaking of so much importance to the nation? He would have laughed at such narrow-minded notions, and would have given twenty millions, had it been thought of at the commencement of the last war, by which one hundred millions would have been saved to the country. I am happy in being enabled to state that I am acting with the entire approbation of the public; and that His Majesty's enlightened Government, the Land-owners, Bankers, Merchants, and Ship-owners, all concur in the utility and importance of the design, and co-operate with one voice and one interest to carry the plan into execution, and that the money will be subscribed upon the plan now before the public.

The intended Bill for making this canal will be so framed as to protect subscribers from any liability beyond the amount of their respective subscriptions.

I am, Sir, your most obedient servant,
Nov. 5, 1827.

N. W. CUNDY.
Projector and Civil Engineer.

TO THE EDITOR OF THE PUBLIC LEDGER.

SIR,

Public men are often attacked by invidious persons, and upon enquiry it is generally discovered that those *aughts or fictions*, assuming to be the Guardians of the Public, have neither an interest in, nor a desire to promote the cause which they profess to enquire into, and their motives arise from self-disappointment.

I am convinced that the fictitious are no friends to the Portsmouth Ship Canal, nor the Public; and as they do not intend to subscribe to the above Plan, why trouble themselves about it? This is not a City Bubble as referred to by anonymous writers in many of the Morning Papers, but is a domestic national undertaking, which offers to the Public Subscriber a solidity equal to Government security; and the Illustrious Personages and Gen-

tllemen who are destined to have the controul and management of it, are selected from the locality and situations in society best calculated to carry the Plan into effect.

As to myself, I have the honour to be the Projector and sturdy advocate of the measure, and have spent four years of my time in investigating and maturing the Plan which is now before the Public, for which I have not received one farthing, either for my professional service or the expences I have been at. The Plan is, therefore, as yet private property, and I respectfully submit that it ought not to be assailed by persons who are ashamed to subscribe their names to their own actions, and who goad the Public from day to day with malignant misrepresentations.

These persons too, are commanding me to answer questions that never did, nor will apply to the Plan before you. I am always ready to give to the Public and all such as are interested in the design, every official information in my power, and when the time arrives, I shall be prepared to give to Parliament the fullest information, and account for the whole of my conduct, with which I doubt not the Public will be fully satisfied. But I shall decline answering idle enquiries or fictitious names.

I am, Sir, your obedient servant,

Nov. 8, 1827.

N. W. CUNDY.

The annexed Plan will show my Line of Survey from the River Thames, near the Victualling Office and Cherry Garden Stairs, Rotherhithe, by Walworth, Kennington, South Lambeth, Battersea Marsh, Wandsworth, Merton, Malden, Epsom, Ashstead, and Leatherhead Commons, Mickleham, Dorking, Ockley, Slinfold, Billingshurst, Pulborough, Arundel, (Arundel Bay,) Chichester, Emsworth, Langston, and Spithead;—also shewing, by the elbow dotted Line, Messrs. Rennie's deviation from my Line at Leatherhead Common, through Guildford to Pallingham.





